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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,871	01/29/2004	Byron G. Merrell	15621.2	4119

22913 7590 09/08/2005

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EXAMINER	
WACHTEL, ALEXIS A	

ART UNIT	PAPER NUMBER
1764	

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

MC

LM

Office Action Summary	Application No. 10/767,871	Applicant(s) MERRELL ET AL.	
	Examiner Alexis Wachtel	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) *1-28* is/are allowed.

6)☒ Claim(s) *29-39* is/are rejected.

7)☒ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10-9-04 pg 1-2 only

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Detailed Action

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 29-39 are provisionally rejected under the judicially created doctrine of double patenting over claims 52-62 of copending Application No. 10/767838. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: claims 52-62 of 10/767838 read on claims 29-39 of the instant application.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other

copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 29-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,948,468 to Reeves et al.

With respect to claim 29, Reeves et al teach a method for processing a feed material, the method comprising: passing a feed material down through a vertically oriented heating chamber of a retort (Fig.1), the feed material being heated and mixed within the heating chamber so that the feed material emits a plurality of different grades of oil vapor as the feed material travels down through the heating chamber (Col 1, lines 29-32).

Reeves et al do not teach collecting a plurality of discrete streams of the oil vapor emitted from the feed material within the heating chamber, each discrete steam being collected along a different elevational section of the heating chamber; and separately condensing each discrete stream of oil vapor.

With respect to claim 30, Reeves et al teach the feed material being substantially uniformly heated and uniformly mixed along the heating chamber (Fig.1).

With respect to claims 31-33, Reeves et al do not teach processing the vapor streams as claimed. However, since it is well established in the petroleum refining art to separate various hydrocarbon fractions in a refining process and condensing said fractions as discrete and separate fractions or blends of other fractions, it would have been obvious to have modified the method of Reeves et al such the resultant vapor streams resulting from a retorting process are separated and condensed as claimed. One of ordinary skill would have been motivated by the desire to provide onset refining means.

With respect to claim 34, Reeves et al teach that the feed material being oil shale (Abstract).

With respect to claim 35, Reeves et al teach separating the feed material by size prior to passing the feed material into the heating chamber so that the feed material has a maximum diameter in a range between about 2 mm to about 10 mm (Col 8, line 19).

4. Claims 38, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,948,468 to Reeves et al in view of US 4,601,812 to Anderson et al.

With respect to claim 39, Reeves et al as set forth above do not teach heating the feed material to a temperature of at least 100 C prior to passing a feed material down through the heating chamber of the retort. Anderson et al teach that oil shale feed is advantageously preheated to about 400F. The use of feed preheat greatly reduces amount of spent shale needed to provide adequate retorting temperature for the mix, allowing a substantial reduction in retort size compared to processes where the feed is not preheated (Col 2, lines 24-35). In view of this teaching it would have been obvious

for one of ordinary skill to have preheated the feed of Reeves et al prior to passing a feed material down through the heating chamber of the retort. One of ordinary skill would have been motivated by the desire to greatly reduce the amount of spent shale needed to provide adequate retorting temperature for the mix, allowing a substantial reduction in retort size compared to processes where the feed is not preheated.

With respect to claim 38, the art combination of Reeves and Anderson et al would inherently result with shale be dried to a least the claimed amount before retorting begins.

Allowable Subject Matter

5. Claims 1-28 are allowable. Claims 36 and 37 would be allowable if rewritten or amended to overcome the rejection(s) as provided by the outstanding double patenting rejection of the instant application, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: with respect to claim 1, the closest prior art, US 4,165,216 to White et al teach the claimed apparatus except for the collection plate having lower end disposed at or adjacent to the partition wall and an opposing upper end disposed at or toward the perimeter wall. Claims 2-15 depend on claim 1 and would also be allowable.

With respect to claim 16, the closest prior art, US 4,165,216 to White et al teach the claimed apparatus except for a first partition wall and a spaced apart second partition wall disposed within the central compartment so as to separate the central compartment into at least a first heating chamber, a second heating chamber, and a vapor chamber, the vapor chamber being disposed between the first and second

heating chambers. Claims 17-28 depend on claim 16 and are would also be allowable.

With respect to claims 36-37, the best art to Reeves et al do not teach or suggest washing or drying shale before processing. In particular, from an efficiency standpoint, having

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Wachtel whose telephone number is 571-272-1455. The examiner can normally be reached on 10:30am to 6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Glenn Caldarola, can be reached at (571)-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Glenn Caldarola
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Technology Center 1700